

Standard Local Operating Procedures for Endangered Species
Red-cockaded Woodpeckers
July 23, 2002 Draft
USFWS South Florida Ecological Services Office

The Standard Local Operating Procedures for Endangered Species (SLOPES), Red-cockaded woodpecker (RCW), provides a tool to assist the user in determining if an action, *i.e.*, a Federal permit, a Federal construction project, or other such action, may adversely affect RCWs. The RCW SLOPES provide the user with a stepwise process to determine if the proposed action will affect RCWs, what effect will the action have on RCWs, and options available that may avoid or minimize the action's effects to RCWs.

The Fish and Wildlife Service (Service) encourages Federal agencies to use the *Technical/Agency Draft Revised Recovery Plan* (Recovery Plan) (Service 2000) for any onsite preservation, enhancement, or management actions they propose that may have an effect on RCWs. The Recovery Plan also provided guidance for offsite mitigation needs for occupied habitat losses, as well. The plan is available at <http://rcwrecovery.fws.gov>.

The Recovery Plan provides information on habitat needs, territory sizes, and species biology. The Service also views this guidance as being applicable to section 7 consultations as a tool to minimize adverse effects to RCWs from the proposed Federal action. The Service has also prepared a RCW survey protocol, which includes South Florida specific guides for RCW surveys, habitat needs, and territory sizes (Service 2002). In addition, the *South Florida Multi-Species Recovery Plan* (Service 1999) provides a synopsis of RCW ecology, as well.

RCW SLOPES Flowchart Guide (see Figure 1)

As with the "SLOPES Process" flowchart, the first step is to require project specific information, which generally includes a project description, habitat maps, project location, and county. On the project maps, determine the boundaries of the project and a ½ mile buffer surrounding the property. The reason for the ½ mile buffer is that the Service's RCW survey protocol (2002) identifies a typical South Florida RCW territory as an area of approximately 500 acres. To identify offsite territories that

may overlap onto the property, the Service determined the center point of a 500-acre circular territory as the furthest point that would allow for overlap of an offsite territory onto the property.

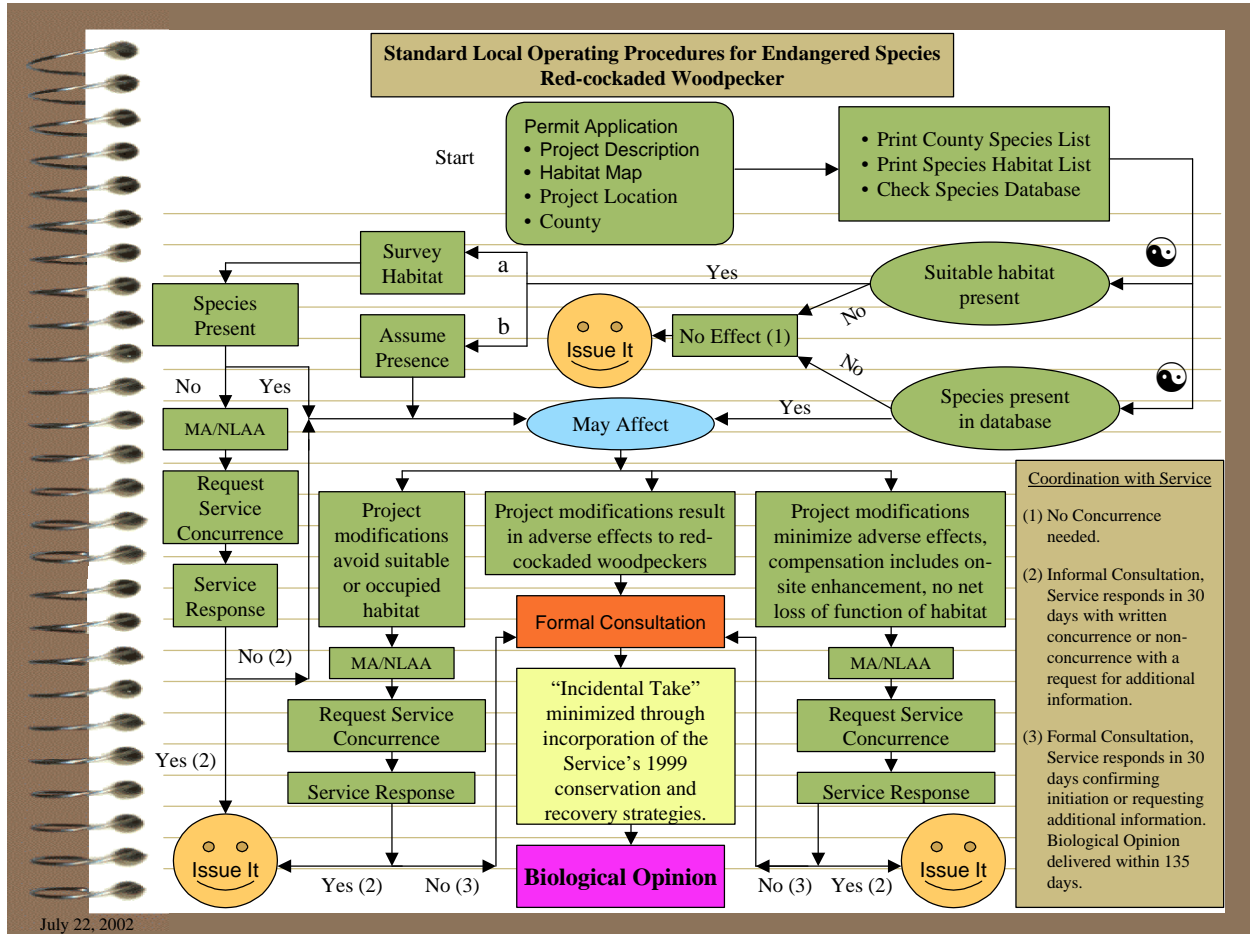


Figure 1. RCW SLOPES Flowchart Guide

The next step is to map the vegetative communities present on the property and in the property buffer area, using one of the community profile guides referenced in the "SLOPES Process" narrative. Also reviewing RCW occurrence records available from the Florida Natural Areas Inventory databases or databases maintained by the Service or other organizations, provides the basis for the first yes/no decision point in the flowchart.

Suitable Habitat/Species Present - Yes/No

The RCW flowchart provides yes/no options for presence or absence of RCWs or suitable habitat. If no occurrence records are present in the databases and no suitable habitat is present, then the Corps may make the determination that the project will have "no effect" on RCWs and can proceed with the Federal action. If desired, the Corps can request a concurrence letter from the Service.

The Service considers suitable habitat for RCWs to include any forested community that includes pines in the canopy. The forested community must be larger than 10 acres and includes both onsite and offsite acreage. If suitable habitat is present, the Service assumes that suitable habitat within the species' historic range still supports listed species and a "may affect" determination is appropriate. In the RCW flowchart, two options are available to assess suitable habitat issues. The first option (option a) provides for the use of species-specific surveys of the property to determine the presence or presumed absence of RCWs in suitable habitat. The second option (option b) assumes that suitable habitat supports RCWs.

RCW Survey Protocol - Option a

Surveys are necessary to determine the presence/absence of cavity trees, cavity tree activity level, and foraging area. Surveys for cavity trees can be performed throughout the year. Cavity tree activity levels require a 14 consecutive day survey event during the nesting season (April 15 through June 15). The foraging area survey requires two survey events, each 14 consecutive days per event. One event is during the nesting season and one event is during the fall season (October 15 through December 15). The survey protocols are time-of-day specific. The time-of-day requirements are one hour after sunrise and ending four hours past sunrise or when local weather conditions become unfavorable (see protocol for specific of weather conditions). Surveys outside of these time frames are inconclusive.

The RCW survey protocols are the minimum levels of effort the Service believes are necessary to determine the presence or absence of this species on the project. A note of importance with species presence on the property, is that suitable habitats

on the property may not be the nest sites of the RCWs, but could be part of the RCWs foraging habitat, which is considered by the Service as occupied, because the habitat fulfills the species life history needs.

RCWs Not Present

If the surveys do not detect the presence of RCWs, then a "may affect, not likely to adversely affect" determination may be reached. To receive concurrence with this determination from the Service, supporting data documenting the level of survey effort in the suitable habitat must be provided, as well as the project description, the project area habitat map, the text descriptions of these habitats, and the reason for the determination, *i.e.*, site-specific surveys of suitable habitats did not detect RCWs. This information must be documented in a report to the Service.

RCWs Present - May Affect

In the flowchart, option b allows for the assumption that suitable habitat supports RCWs. The flowchart also provides for projects where RCWs are known to be present on the property. In both of these scenarios, the Corps is advised that a "may affect" determination is warranted and additional measures are necessary to minimize adverse effects to RCWs.

Habitat Avoidance

The first measure recommended by the Service is to modify the project footprint to avoid direct impacts to RCW habitat. The Service also recommends that the habitat be designated as an environmentally sensitive area and set aside by deed restriction, easement, or other protective covenant. If the occupied habitat exceeds 5 acres, then a habitat management plan is also recommended. The incorporation of these recommendations into the project design and documented in the habitat management plan would allow the Corps to make the determination that the project "may affect, but is not likely to adversely affect" listed species and request concurrence from the Service. Upon receipt of the concurrence request and the supporting data, the Service could provide concurrence with the "may affect, but is not likely to adversely affect" determination.

Onsite Habitat Enhancement

This measure is recommended by the Service in situations where a project proposes to impact occupied RCW habitat. However, surveys of the habitat have noted that the habitat has been physically altered by exotic species invasion, lack of fire, or other anthropogenic actions. These alterations have produced habitat conditions onsite, which have resulted in marginally suitable habitat for the survival and propagation of RCWs. The planned action, through project redesign, has avoided impacting a substantial portion of the habitat, however some habitat loss will still occur. The project proposes onsite habitat enhancements and management actions that provide habitat quality improvements that balance losses of small amounts of marginally suitable habitat onsite. The incorporation of these recommendations into the project and documented in a habitat management plan would allow the Corps to make the determination that the project "may affect, but is not likely to adversely affect" listed species and request concurrence from the Service. Upon receipt of the concurrence request and the supporting data, the Service could provide concurrence with the "may affect, but is not likely to adversely affect" determination. The management plan, in this scenario, also needs a monitoring program to document the success of the enhancement actions.

"Incidental Take" Likely

The remaining measures available to minimize "adverse effects" to RCWs are those associated with projects where onsite habitat avoidance, preservation, or enhancement are insufficient in minimizing "adverse effects" or are not appropriate and "incidental take" of RCWs is likely. The Service recommends that occupied habitat be avoided and preserved. However, if the amount of habitat onsite and in the adjacent offsite buffer is not sufficient to support a RCW family, then "incidental take" of the RCW family is likely. Sufficient habitat for this evaluation is 500 acres of suitable habitat, which is the average size of a RCW territory.

Since "incidental take" is the outcome of this scenario, formal consultation is necessary and the Service will prepare a Biological Opinion. The Biological Opinion will include the amount of "incidental take" anticipated and the non-

discretionary reasonable and prudent measures and terms and condition that are appropriate for the project.

To assist the Corps in minimizing "adverse effects" from anticipated "incidental take," the Service has developed species-specific measures that are applicable to projects where compensation for "adverse effects" is appropriate. These species-specific measures further the Service's goals for conservation and recovery of the species. The species-specific measures are discussed in detail in the Recovery Plan (Service 2000). The Service has also prepared a condensed "bulleted" version of the species-specific measures (see below).

The Recovery Plan identifies 11 RCW recovery units where conservation and recovery goals for the species can be achieved. One of the recovery units, the South/Central Florida Recovery Unit includes the RCW populations in southwest Florida, southeast Florida, and southcentral Florida. For the South/Central Florida Recovery Unit, the Recovery Plan also identifies essential support populations, which are included in the Service's criteria for delisting. These populations are those found on Avon Park Air Force Range, Big Cypress National Preserve, Ocala National Forest, Three Lakes Wildlife Management Area, Withlachoochee State Forest, Webb Wildlife Management Area, J.W. Corbett Wildlife Management Area, Goethe State Forest, St. Sebastian River State Buffer Preserve, Howe Scott Preserve, and Picayune Strand State Forest.

The recovery goals can be achieved either through efforts to expand the boundaries of existing preserves or through efforts to protect and manage occupied and unoccupied habitats, which are contiguous to the preserved lands or are within unobstructed RCW dispersal distances (not to exceed 2 miles) from the preserved lands. The measures recommended are primarily acquisition and management functions. In general, the acquisition ratios are, 2 acres of occupied habitat for each acre of affected occupied habitat, or a minimum of 3 acres of unoccupied habitat for each acre of affected occupied habitat. The unoccupied habitat acquisition requires a restoration component, as well. The specifics of each of these measures are in the Recovery Plan and should be incorporated into the habitat management plan and submitted as part of the data needs for the Biological Opinion

As discussed in the SLOPES Process narrative and on each of the flowcharts, formal consultation, which concludes with the Service's Biological Opinion, generally requires up to 135 days. However, incorporation of the minimization recommendations into the project and provided to the Service in the habitat management plan can expedite the consultation process.

Habitat Management Plan

A Habitat Management Plan is necessary when a proponent proposes actions that may affect RCWs. In general, the plan includes a project introduction, proposed action, project habitat descriptions, species effects, recommendations to minimize species effects, and conclusions and commitments. The plan should also include the survey protocol, survey data sheets, territorial boundaries of the RCWs, if present, and any land preservation covenants. If habitat enhancements are proposed, the management plan needs to include a habitat monitoring component. Refer to the Service's *Outline Example for a Biological Assessment or a Biological Evaluation* (2002) for a more detailed discussion of report requirements, format, explanations of common ESA questions, and level of detail needed in the report.

RCW Management Options

Pine stands, or pine-dominated pine/hardwood stands, with a low or sparse midstory and ample old-growth pines, constitute primary RCW nesting, roosting, and foraging habitat. RCWs are the only North Americans species that excavates its roost and nest in living pine trees. The Service considers all cavities in living pines to be RCW cavities unless documented as being usurped by other cavity nesting/roosting species (pileated woodpecker, red-headed woodpecker, red-bellied woodpecker, blue bird, flying squirrels, etc.). The Service considers all clusters to be active unless cluster monitoring documents abandonment for five consecutive years.

a. RCWs will abandon otherwise suitable nesting/roosting areas (including existing cavities) when the midstory approaches cavity height (midstory height should generally be less than 12 feet with ample open grassy, savannah habitat). Growing season burns are recommended every three to five years to control the amount of young pine and hardwood midstory.

b. Colonization of unoccupied habitat is an exceedingly slow process, because cavities take long periods of time to excavate and birds do not occupy habitat without cavities. Artificial cavity construction has been shown to be successful in recruiting RCWs into otherwise unoccupied but suitable habitat. The Service recommends a minimum of four cavities (clustered together) within suitable RCW habitat. Dispersal range for recruitment should not exceed 2 miles.

c. Translocation of young from existing colonies to new clusters has been shown to be successful in establishing new colonies. Translocation is recommended when new clusters exceed the recommended dispersal distance from existing colonies.

d. Cluster management restrictions: (i) Minimum cluster boundaries, including all cavities and a 200-foot buffer, is 10 acres (400-foot radius), centered around primary cavity nesting tree, (ii) restrict midstory hardwood and thinning of overstory pines to outside the nesting season, (iii) provide minimum of 50 feet of fire suppression around each cavity tree, (iv) maintain minimum of four cavities in managed clusters, and (v) restrict human disturbance within the cluster during nesting season, restrictions include all-terrain and off-road vehicles, motorized logging equipment, and excessive noise and disturbance.

e. Colony management: (i) prescribed fire every three to five years and (ii) manage forest growth and density to provide open midstory and mixed age pine canopy.

Foraging Habitat Management Goals.

Good quality foraging habitat has some large old pines, low densities of small and medium pines, sparse or no hardwood midstory, and bunchgrass and forbs groundcover. Recommended management goals include:

a. North, central, and southeast Florida: (i) Provide 18 or more pines per acre that are at least 60 years in age and are at least 14 inches in diameter at breast height (dbh), (ii) manage the density of all pines \geq 4 inch dbh to provide between 40 to 80 square feet per acre of basal area, (iii) manage the density of all pines between 4 and 10 inches in dbh to provide a basal area of less than 10 square feet per acre, and manage the

density of all pines to less than 20 stems per acre (Service 2000).

b. Southwest Florida: (i) Provide 5 to 8 pines per acre that are at least 60 years in age and are at least 10 inch dbh, (ii) manage the density of all pines to provide a basal area of approximately 20 square feet per acre, and manage the density of all pines to less than 54 stems per acres (Beever and Dryden).

c. All: (i) ground cover of native bunchgrass and/or other native, fire-tolerant, fire-dependent herbs totaling 40 percent or more of ground and midstory plants and dense enough to carry growing season fire at least once every five years, (ii) no hardwood midstory or a sparse hardwood midstory that is less than 7 feet in height, (iii) canopy hardwood absent or less than 10 to 20 percent, (iv) 50 percent or more of this habitat within 0.25 miles of the cluster, all must be within 0.5 miles of the cluster, and (vi) foraging habitat may not be separated by more than 200 feet (north, central, and southeast Florida) and 300 feet (southwest Florida).

References

Beever, J.W. and K. Dryden. 1992. Red-cockaded woodpeckers and hydric slash pine flatwoods. Transactions of the 57th North American Wildlife and Natural Resources Conference 57:693-700.

U.S. Fish and Wildlife Service. 2002. Survey protocol, red-cockaded woodpecker. South Florida Ecological Services Office, Vero Beach, Florida.

U.S. Fish and Wildlife Service. 2002. Outline example for a biological assessment or a biological evaluation. South Florida Ecological Services Office, Vero Beach, Florida.

U.S. Fish and Wildlife Service. 2000. Technical/agency draft revised recovery plan for the red-cockaded woodpecker. U.S. Fish and Wildlife Service; Atlanta, Georgia.

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Atlanta, Georgia.